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Fitness Trail

Building, Signing, and Using the Trail

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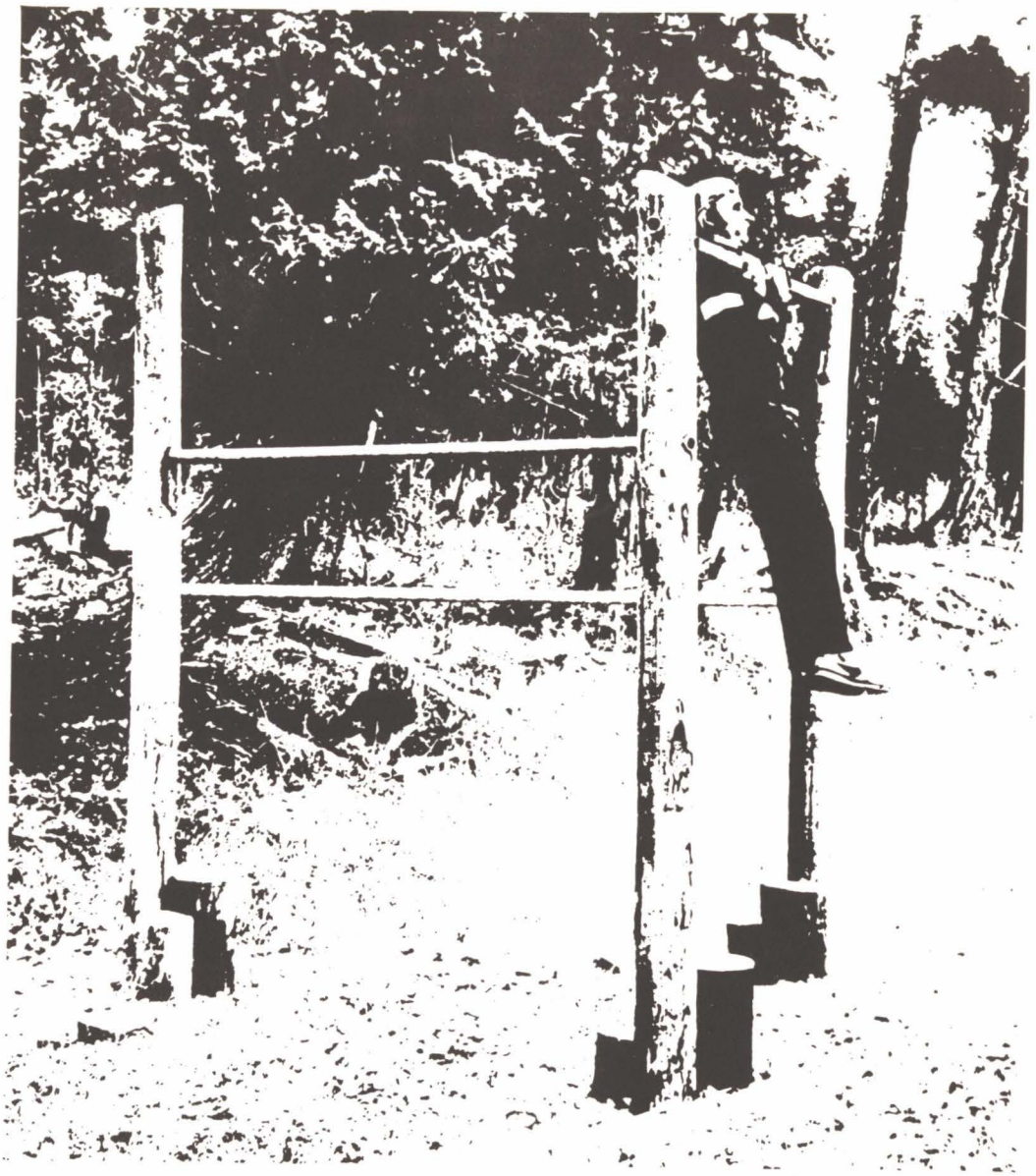

Fitness Trail

Building, Signing, and Using the Trail

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The Fitness Trail was designed and developed by the Forest Service Missoula Equipment Development Center, Missoula, Mont. Forest Service and cooperating resource agencies use the trail to train forest work crews and for general employee fitness. The Forest Service also has cooperated with park and recreation departments, schools, colleges, service clubs, and other organizations interested in building the Fitness Trail. Several hundred trails are in use.

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One of a series of publications on health, fitness, and work capacity developed by the Forest Service Missoula Equipment Development Center.

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August 1984

Fitness Trail Testing and Training Circuit

There are many kinds of physical fitness testing and training facilities—almost as many as training goals. But for conditioning workers to accomplish hard field tasks, a fitness circuit is best. It conditions heart and lungs and increases muscular strength, endurance, and flexibility.

These pages describe the Fitness Trail, a circuit designed specifically for forestry field workers. Included are plans for building the trail, construction guidelines, materials lists, and signing information.

About the Trail

The Fitness Trail consists of seven dual-purpose exercise stations along a ¼-mile jogging path. Individuals walk or jog between stations, complete the exercise, and continue on until they have finished the course. Signs describe and illustrate each exercise.

The trail fits on 2 acres of land and costs about $500 in materials to construct. Where space permits, an additional loop for distance running is recommended.

With a small investment in land and dollars, you can build a Fitness Trail to meet employee needs, whether for serious training or informal exercise. In some areas, trails could be open to the public, too.

However, the information in this publication does not reflect official Forest Service policy and individuals may need professional medical advice before using the trail.

Versatility

The Fitness Trail is a versatile testing and training circuit—ideal for individual or group training. It offers safe, healthful exercise regardless of age or conditioning. Individuals progress at their own rate and do as few or as many repeats of the exercises as they wish. They may also jog the trail, ignoring the exercises. The trail provides an enjoyable physical challenge that encourages the fitness habit.

Origins of the Trail

The Fitness Trail was inspired by the popular Swiss exercise trails, the Vita Parcours. With the financial backing of the Vita Insurance Co., more than 150 parcours (French for track or course) have been built in Switzerland. The idea spread quickly to much of Europe, where most segments of the population are now able to enjoy parcours.

One of the first courses in this country was built at Orofino, Idaho, with the help of Andy Arvish, a Forest Service employee. Another early course was developed by John Burton, also of the Forest Service, while a student at the University of Montana. Today, the President's Council on Physical Fitness and Sports is encouraging construction of Vita Parcours across the United States.

Features
The Fitness Trail was developed after a thorough evaluation of Vita Parcours and other circuit training facilities. Use patterns and design problems of these courses were evaluated, and their best features retained or modified to train forestry field workers.

Fitness Trail features:

- Low cost—inexpensive to build and maintain.
- Dual-purpose exercise stations.
- Training and testing facility.
- Suited to all ages and fitness levels.
- Safe, effective exercise to strengthen muscles and condition heart, lungs, and legs.
- Little visual impact on the forest environment.

Training
Training on the trail can take many forms: formal or informal, group or individual.

When organizing a formal fitness program around the trail, emphasize muscular fitness training Monday, Wednesday, and Friday, with individuals performing as many repetitions of each exercise as possible at the stations. To increase progress, they should do a set of exercises, rest, and repeat the set.

Emphasize jogging on Tuesday and Thursday. Some jogging should be done after muscular fitness training. Here are some suggested running distances:

Fitness Level	Mon/Wed/Fri	Tues/Thurs
Low	1-2 miles	2-3 miles
Medium	2-3	3-5
High	3-4	4-6

The fitness enthusiast may want to take a longer run on the weekend.

Self-Testing
The bench at station 14 can be used to train and self-test for the step test, which is the aerobic fitness test that Federal resource agencies use to qualify people for wildland firefighting jobs. An alternative aerobic test, the 1½-mile run can be administered on the trail (six laps of the ¼-mile circuit).

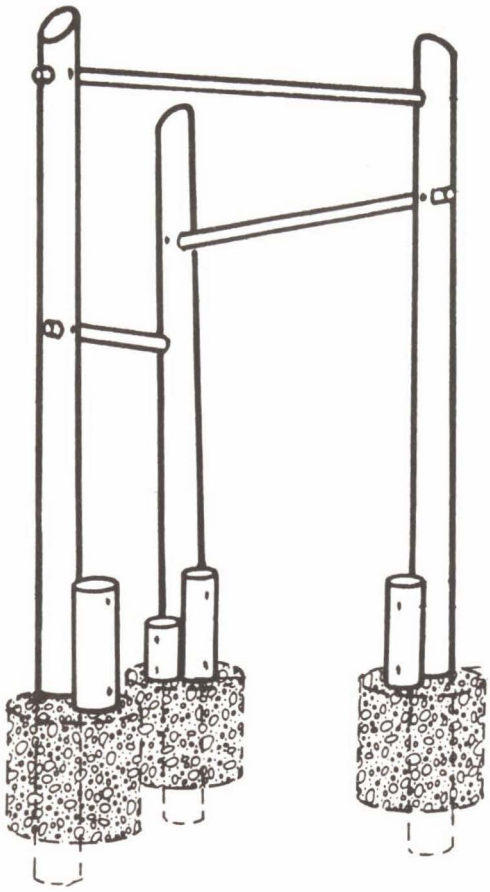
Muscular fitness also is related to field performance. Muscular fitness can be evaluated at stations 1, 6, and 10 as follows:

Station	Test	Fitness goal	
		Weight	*Repetitions*
1	Chinup (arm & shoulder flexion strength)	under 110	7
		110-135	6
		135-175	5
		over 175	4
6	Situp (trunk strength & endurance)	30 in 60 seconds	
10	Pushup (arm & shoulder endurance)	20 in 60 seconds	

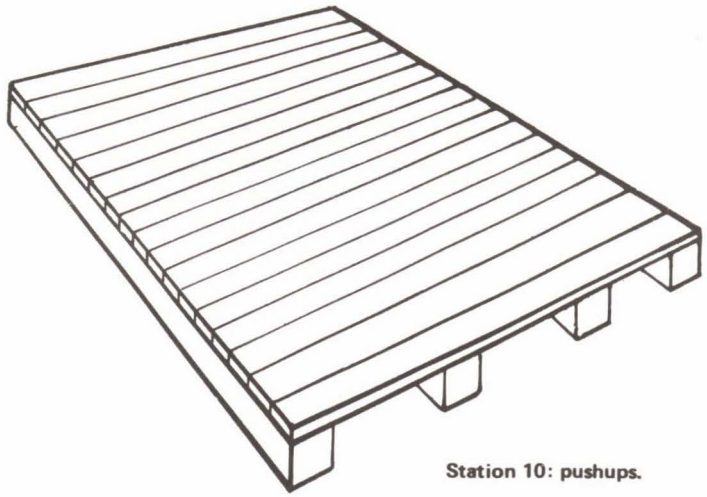
Individuals can gage their progress by completing the course as quickly as possible, doing a specific number of repetitions at each station. Later tests with the same number of repetitions indicate the rate of progress.

Get the most from your Fitness Trail:

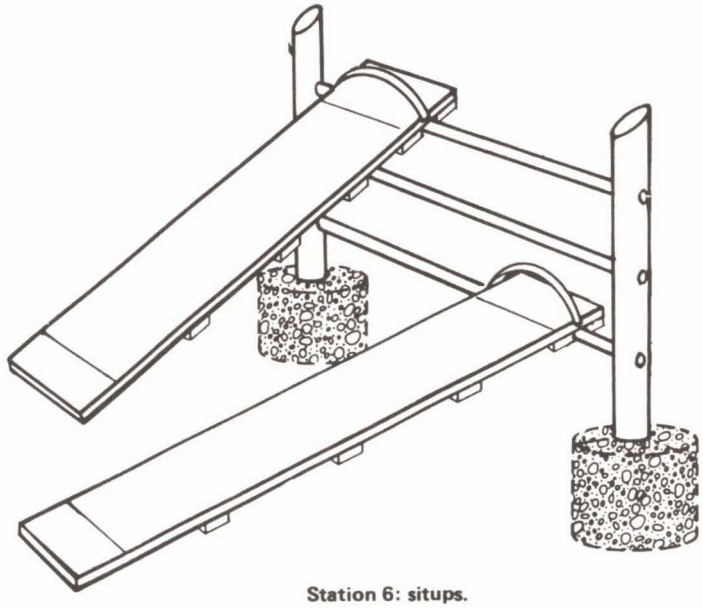
- Publicize the trail's opening.
- Develop a brochure and map explaining the trail and distance loop and how to use them (see page 28).
- Encourage all employees to use the trail.
- Use it for testing and training.
- Publicize outstanding performances.
- Hold competitions and fitness days.
- Invite schools, organizations, and the public to use it.
- Direct campers and other travelers to the trail.



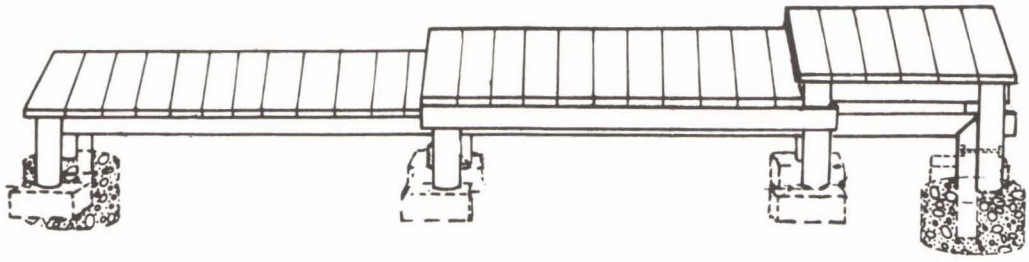
Station 1: chinups.



Station 10: pushups.



Station 6: situps.



Station 14: training for step test.

Building the Trail

Selecting Trail Site

In choosing a site, first determine how much sun the area gets, how well the soil drains, and if the area can stand heavy recreational use. The site should be fairly level. Keep esthetics in mind—will this be a pleasant spot to exercise? If possible, have a landscape architect help you select the site and lay out the trail.

Location should also depend on who will use the trail. Is it only for employees or for the public too? The trail should be accessible for users. You will probably want to add a distance loop for longer runs, so make sure the surrounding area is suitable. The distance loop should begin and end at the trail, but it can follow established roads and trails for the most part.

Laying Out the Trail

First, rough out the trail by pacing off a ¼-mile jogging path. When possible locate the trail so it passes through varied country such as a meadow and a stand of trees. Keep curves wide so runners can take them at a fast pace. Note locations of exercise stations and make sure the terrain is suitable for each station.

Once the trail is paced off, measure the distance for accuracy with a 100-foot tape or other measuring device.

Constructing Jogging Path

First, level and smooth the path as much as possible. Fill low spots and cut humps and uneven high spots. Dig or cut out rocks and roots. You may want to cut a shallow trench for the entire path, which will help keep surfacing materials in place. The path should be at least 5 feet wide so two people can jog side by side comfortably.

If you are training crews in fireline construction, apply the training to clear the jogging path. Where labor is limited, small power tools like the flail (fireline) trencher should prove valuable. Other forest trailbuilding equipment or small garden rototillers, tractors, or plows could be helpful.

Second, surface the path with woodchips, pea gravel, or other native materials that will make a good running surface and keep the path dry and dust-free.

Building Exercise Stations

Refer to the construction guidelines for detailed information on building each exercise station. Place the stations along the jogging path in the order shown on the Fitness Trail map. The sequence has been planned to exercise specific muscle groups in turn and not fatigue any one group excessively.

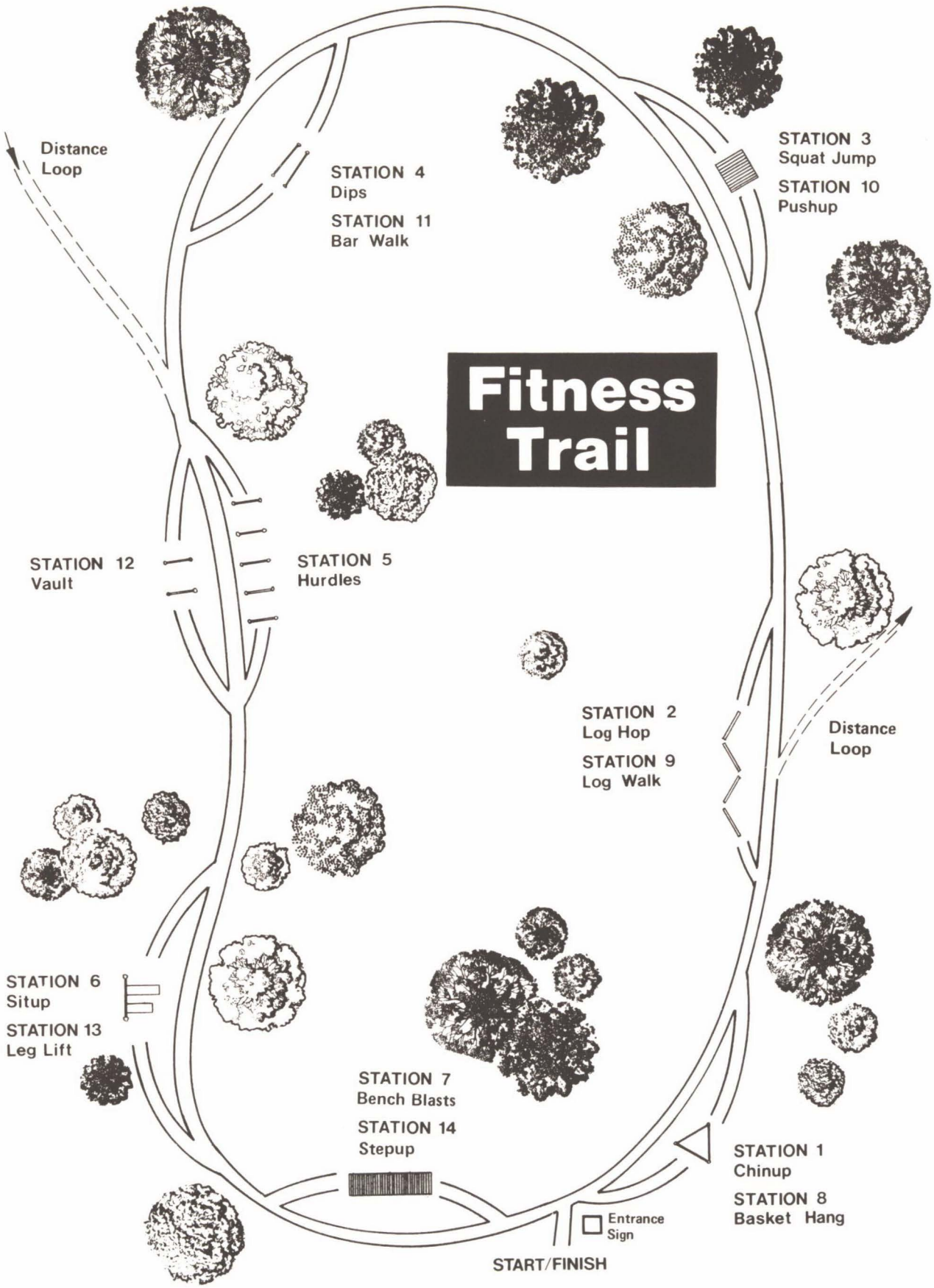
Exercise stations can be left natural, stained, or painted to better blend with the surroundings.

Maintaining the Trail

To insure continued safe trail use, annual maintenance is advisable. This should include thorough checks of all the equipment, signs, and trail surface.

If the woodchips are wearing thin at any spot on the trail or around the exercise apparatus, more chips should be added. In the spring, a roller should be used to pack the trail surface.

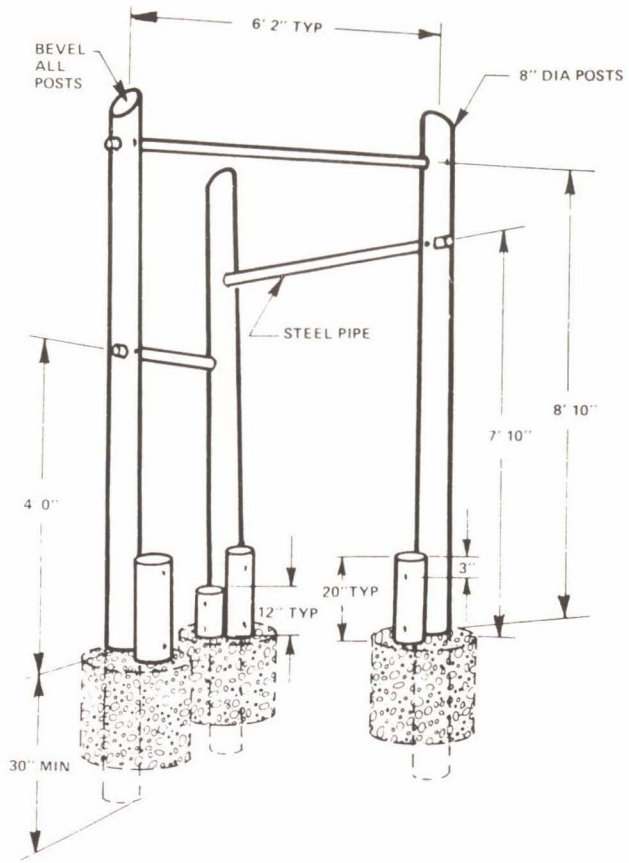
Because vandalism is high in certain areas, it may be necessary to perform frequent, perhaps monthly, checks of the signs and station equipment. If brochures on how to use the trail are left at the entry sign, the supply will probably have to be replenished weekly.


Fitness Trail
Distance Loop
STATION 4
Dips
STATION 11
Bar Walk
STATION 3
Squat Jump
STATION 10
Pushup
STATION 12
Vault
STATION 5
Hurdles
STATION 2
Log Hop
STATION 9
Log Walk
Distance Loop
STATION 6
Situp
STATION 13
Leg Lift
STATION 7
Bench Blasts
STATION 14
Stepup
STATION 1
Chinup
STATION 8
Basket Hang
Entrance Sign
START/FINISH

Station 1/8

CHINUP/BASKET HANG

Materials
- 3 Treated posts (8 inches by 14 feet)
- 1 Treated or untreated post (8 inches by 8 feet)
- 3 Schedule 80 (1.66od x .200 wall) galvanized steel pipes (1¼ inches by 7 feet)
- 3 Bolts, nuts, washers (3/8 by 8 inches)
- 12 Lag screws, washers (3/8 by 12 inches)



Construction Guidelines

1. Lay out triangle with sides measuring 6 feet 2 inches. Each point will be the center of a post hole.

2. Dig holes 30 inches deep.

3. Set posts; backfill hole 6 to 8 inches and tamp. Plumb posts.

4. Fill with concrete and check for plumb.

5. After concrete cures (24 hours), cut posts off at a bevel at 9 feet 10 inches.

6. Locate holes for chinup bars.

7. Pilot drill pipe holes with a 3/8- by 12-inch shank bit; use a heavy-duty, ½-inch electric drill, if power is available.

8. Drill 1¾-inch holes using a 1¾-inch self-feeding bit with a 12-inch extension.

9. Install pipes. Pipes may have to be driven through the holes with a small striking hammer.

10. At one end of each pipe, drill a 3/8-inch hole through the post and center of the pipe so the bar can be pinned with a 3/8-inch bolt. Countersink both ends of the bolts.

11. Cut three 20-inch and three 12-inch stepping blocks from leftover 8-inch-diameter treated or untreated post ends.

12. Locate and drill 3/8-inch holes through stepping blocks. Countersink with a 1-inch bit.

13. Locate and drill pilot holes in main posts.

14. Bolt steps in place with 3/8- by 12-inch lag screws.

Station 2/9

LOG HOP/LOG WALK

Materials
4 Peeled, untreated logs (12 inches by 8 feet)
8 Concrete reinforcing bars (½ by 30 inches)
1 Cedar or redwood post (4 by 4 inches by 8 feet)

Construction Guidelines

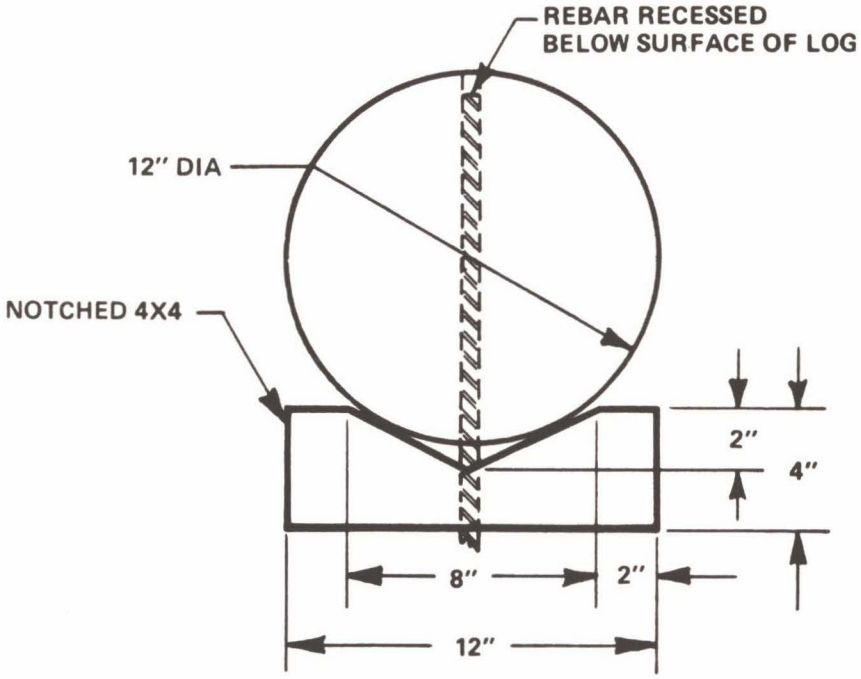
1. Lay out eight 1-foot-long blocks on an 8-foot-long 4 by 4. Notch as shown in drawing.

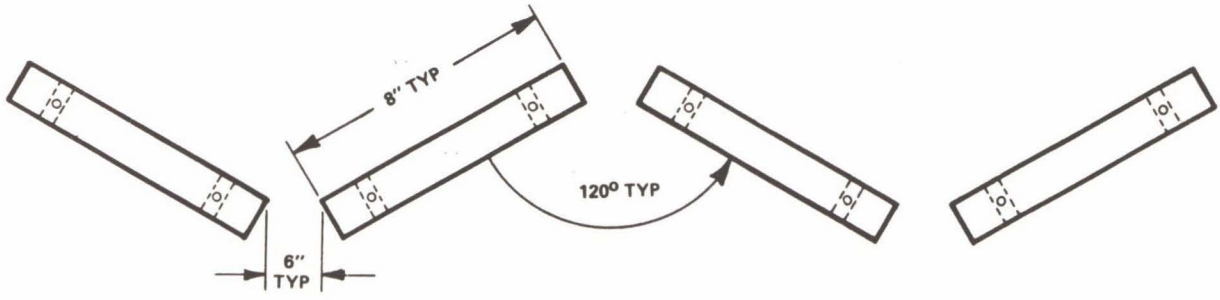
2. Drill a ½-inch hole through the center of each 4- by 4-inch piece.

3. Drill a ½-inch hole about 12 inches from each end of each 8-foot log.

4. Place logs on 4- by 4-inch pieces and aline holes and logs to proper position.

5. Drive a 30-inch piece of rebar through the holes in the logs and 4 by 4's and into the ground with a sledge-hammer. Use a short (6-inch) piece of rebar as a punch to countersink the rebar about 1 inch below the top surface of the log.





Station 3/10

SQUAT JUMP/ PUSHUP

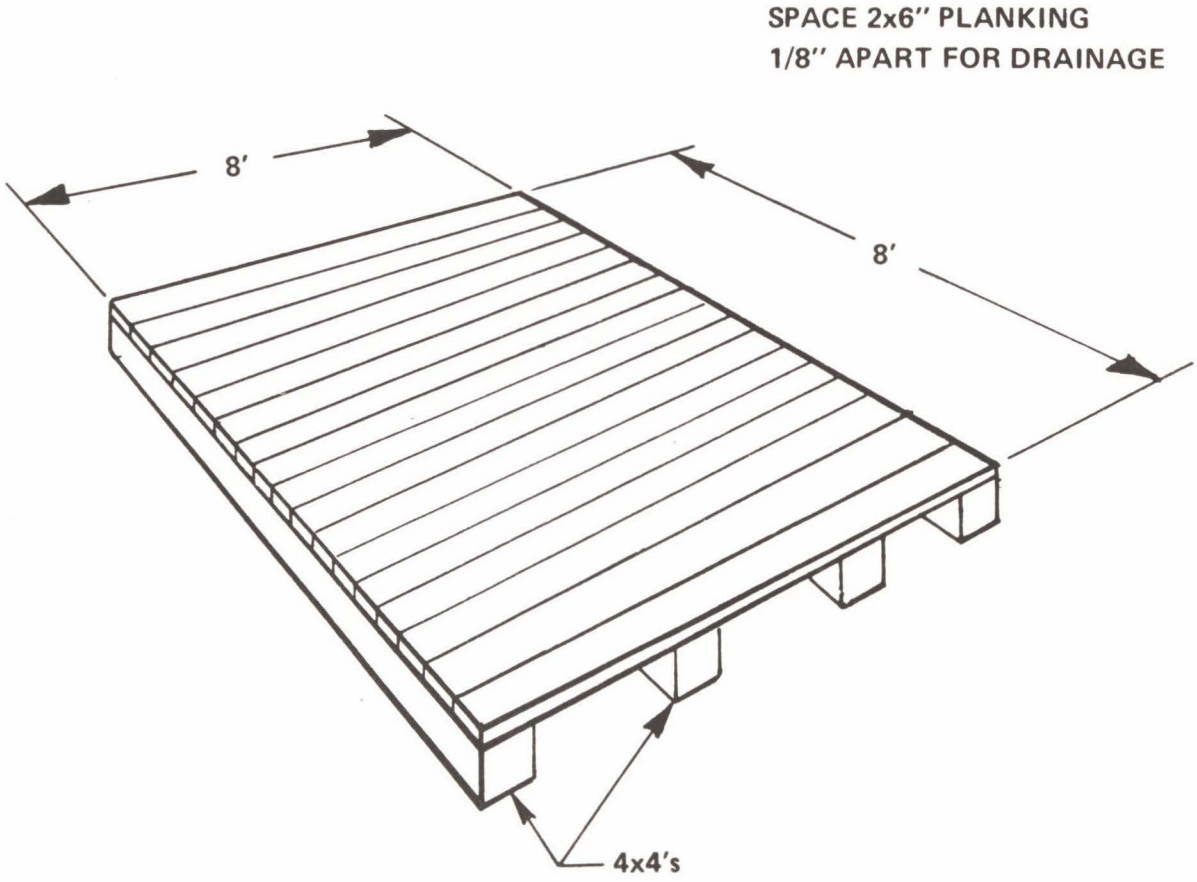
Materials
4 Cedar or redwood posts (4 by 4 inches by 8 feet)
17 Pieces dimension lumber (2 by 6 inches by 8 feet)
2 Pounds 16 penny nails

Construction Guidelines

1. The pushup station may be constructed onsite or made indoors and taken to the site.

2. Place the structure on the ground to check for high or low places.

3. Smooth the site so the structure rests on the ground without rocking.



Station 4/11

DIPS/BAR WALK

Materials
4 Treated posts (6 inches by 8 feet)
2 Schedule 40 (1.9od x .145 wall) galvanized steel pipes (1½ inches by 8 feet 6 inches)
2 Bolts, nuts, washers (3/8 by 6 inches)
2 Lag screws, washers (3/8 by 10 inches)

Construction Guidelines

1. Measure hole locations according to drawing specification.

2. Dig holes 24 inches deep.

3. Set posts; backfill hole 6 to 8 inches and tamp. Plumb posts.

4. Fill with concrete and check for plumb.

5. After concrete cures (24 hours), cut posts off at a bevel at 60 inches.

6. Locate holes for crossbars.

7. Pilot drill crossbar holes with a 3/8- by 10-inch shank bit; use a heavy-duty, ½-inch electric drill, if power is available.

8. Drill 2-inch holes using a 2-inch, self-feeding bit with a 12-inch extension.

9. Install pipes. Pipes may have to be driven through the holes with a small striking hammer.

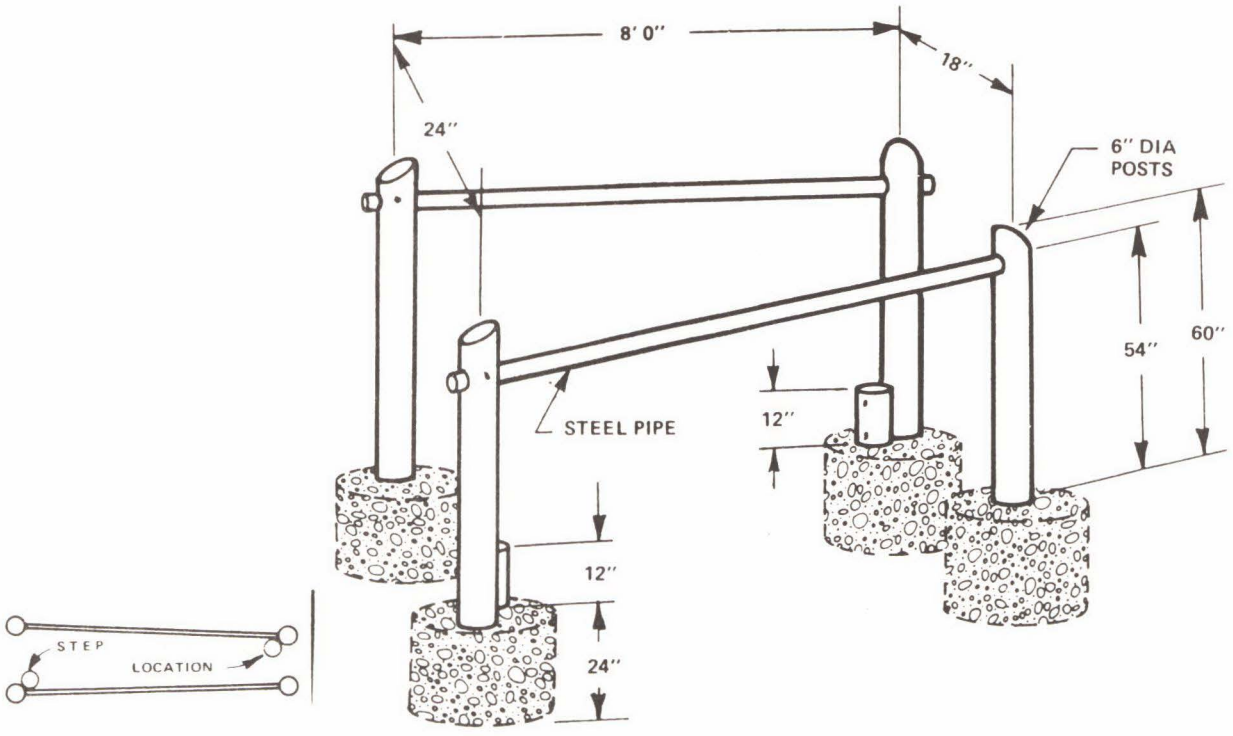
10. At one end of each pipe, drill a 3/8-inch hole through the post and center of the pipe so the pipe can be pinned with a 3/8-inch bolt. Countersink both ends of the bolts.

11. Use two of the 12-inch pieces that were cut off the upright posts for the steps.

12. Locate and drill 3/8-inch holes through stepping blocks. Countersink with a 1-inch bit.

13. Locate and drill pilot holes in main posts.

14. Bolt steps in place with 3/8- by 12-inch lag screws.



Station 5

HURDLES

Materials
10 Treated posts (6 inches by 3 feet)
5 Untreated rails (4 inches by 7 feet)
10 Lag screws, washers (3/8 by 6 inches)

Construction Guidelines

1. Lay down two parallel string lines 6 feet 6 inches apart.

2. On one string line locate five post hole centers 10 feet apart and dig holes 18 inches deep.

3. Locate the number two post hole on second string line by measuring 11 feet 11 inches diagonally between post holes three and two as shown in drawing. Locate remaining holes on second string line.

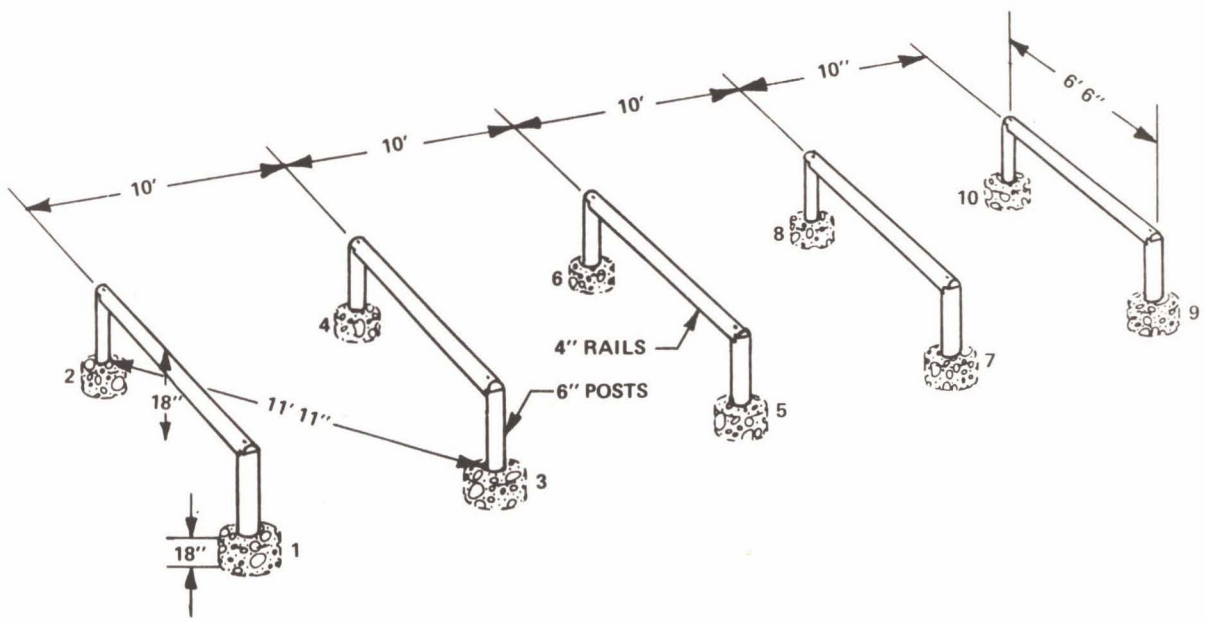
4. Place posts in holes and tamp in 2 or 3 inches of dirt. Pour concrete and plumb posts.

5. After concrete cures (24 hours), measure the distance between posts for each hurdle and cut the notches in each rail accordingly.

6. Cut off the posts so that when the notched rail is set onto the posts, the top of the rail will measure 18 inches from the ground.

7. With all the rails in place, drill a ¼-inch hole through each end and into the posts about an inch. Countersink the holes with a 1-inch-diameter bit deep enough so the heads of the bolts are flush with the top of the rail.

8. Start 3/8- by 6-inch lag screws with a few taps from a hammer and screw into place.



Station 12

VAULT

Materials
2 Treated posts (6 inches by 6 feet)
2 Treated posts (6 inches by 7 feet)
2 Untreated rails (4 inches by 7 feet)
4 Lag screws, washers (3/8 by 6 inches)

Construction Guidelines

1. Locate holes and dig them 24 inches deep.

2. Set posts in place and tamp in 2 or 3 inches of dirt around the base of each post.

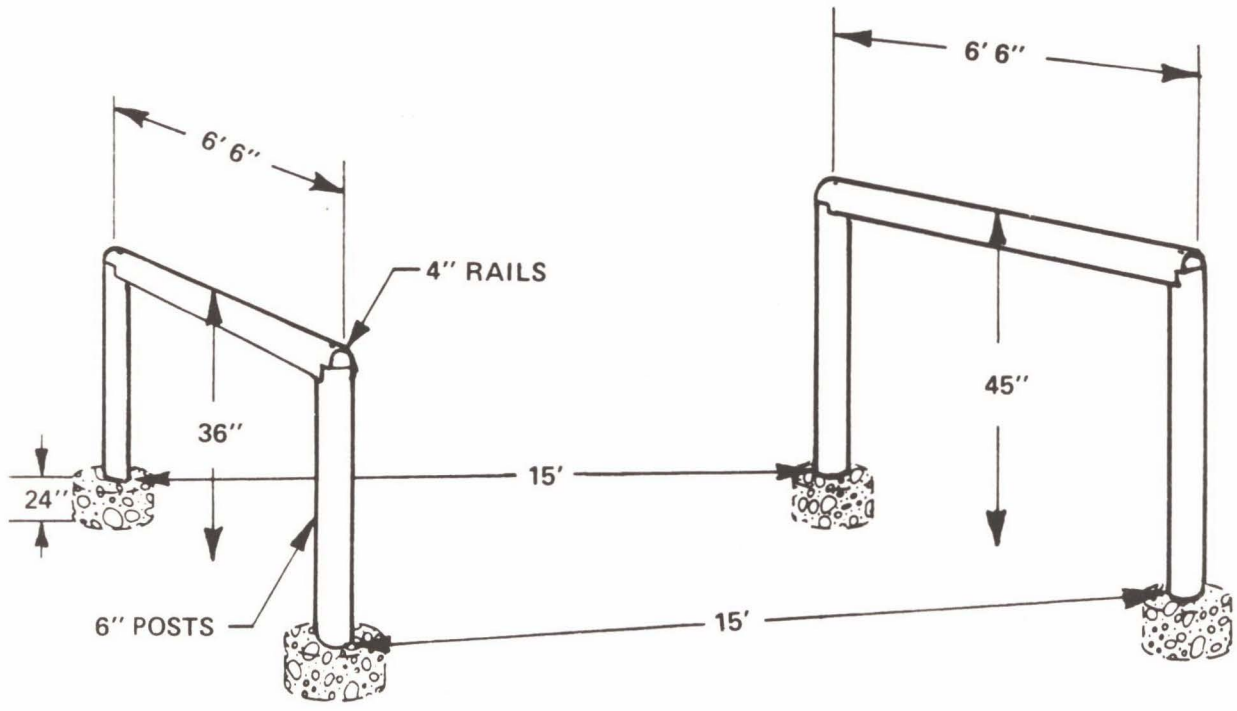
3. Pour concrete and plumb posts before concrete begins to cure. Allow concrete to cure 24 hours.

4. Measure the distance between posts for each vault and cut the notches in the rails accordingly.

5. Cut the posts off so when the notched rail is set onto the posts, the top of the rail will measure 36 inches for the short vault and 45 inches for the tall vault.

6. With the rail in place, drill a ¼-inch hole through each end and into the posts about 1 inch. Countersink the holes with a 1-inch-diameter bit deep enough so the heads of the bolts are flush with the top of the rail.

7. Start 3/8- by 6-inch lag screws with a few taps from a hammer and screw into place.



Station 6/13

SITUP/LEG LIFT

Materials
- 2 Treated posts (8 inches by 6 feet)
- 3 Schedule 40 (1.9od x .145 wall) galvanized steel pipes (1½ inches by 6 feet 8 inches)
- 4 Pieces dimension lumber (2 by 10 inches by 8 feet)
- 2 Pieces dimension lumber (2 by 4 inches by 8 feet)
- 40 Bolts, nuts, washers (½ by 3 inches)
- 2 Strips nylon webbing (1¾ by 48 inches)
- 2 Steel adjuster buckles
- 2 Ethafoam pads (½ by 19 inches by 6 feet 4 inches)
- 1 Tube styro bond or vinyl adhesive

Construction Guidelines

1. Locate post holes 6 feet between centers.

2. Dig holes 24 inches deep.

3. Set posts; backfill hole 6 to 8 inches and tamp. Plumb posts.

4. Fill with concrete and check for plumb.

5. After concrete cures (24 hours), bevel posts at 48 inches.

6. Locate holes for horizontal pipes.

7. Pilot drill horizontal pipe holes with a 3/8- by 10-inch shank bit; use a heavy-duty, ½-inch electric drill if power is available.

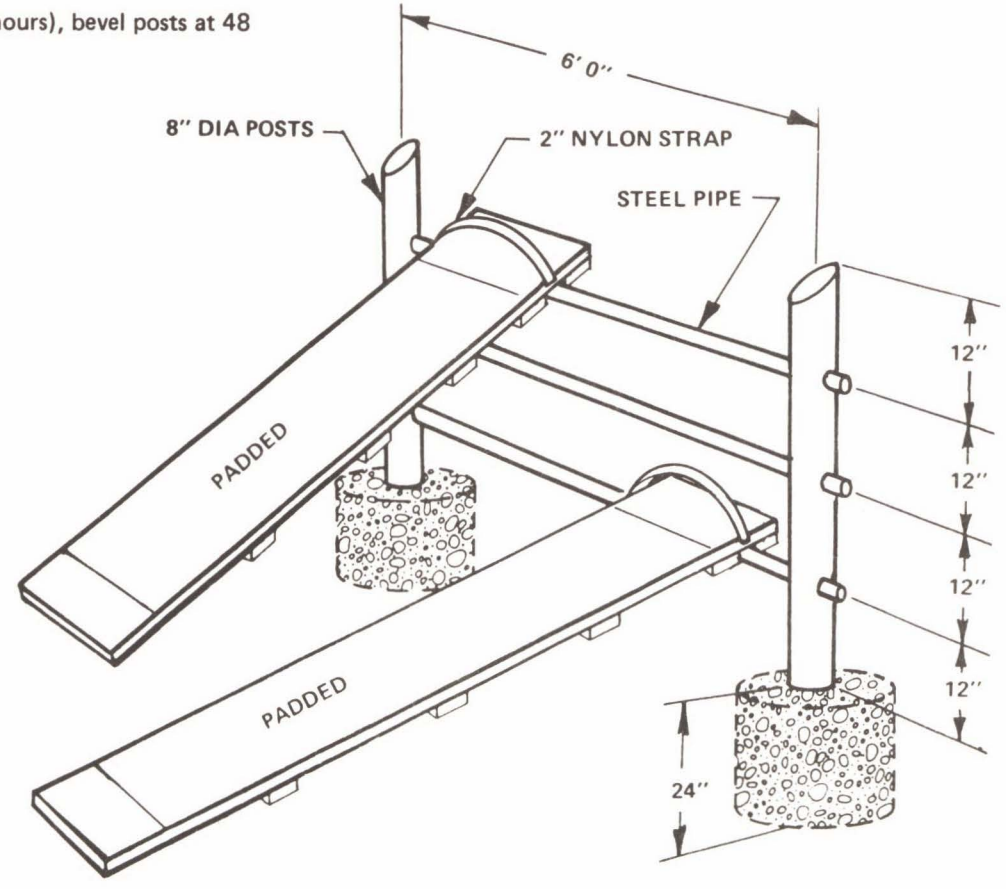
8. Drill 2-inch holes using a 2-inch, self-feeding bit with a 12-inch extension.

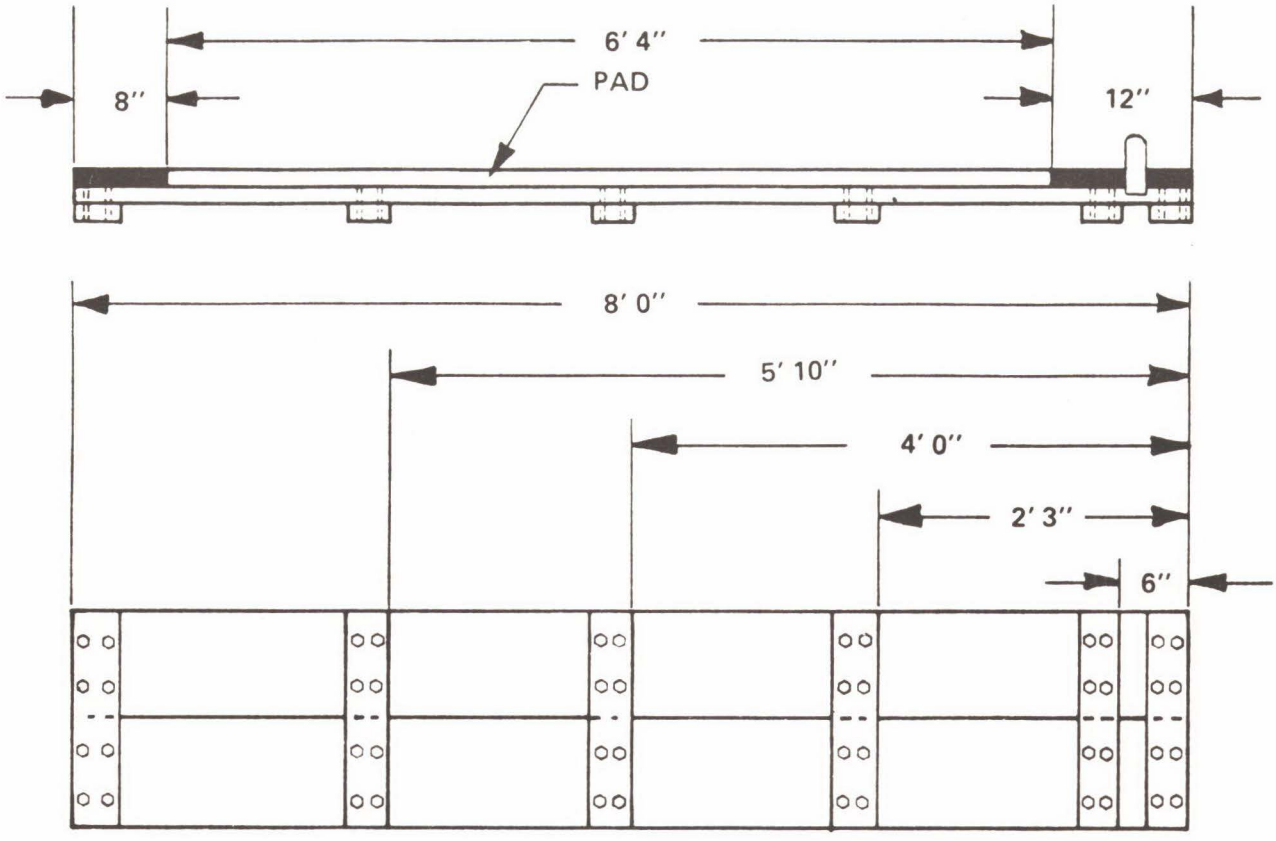
9. Install horizontal pipes. Pipes may have to be driven through the holes with a small hammer.

10. At one end of each horizontal pipe, drill a 3/8-inch hole through the post and the center of the pipe so it may be pinned with a 3/8-inch bolt. Countersink both ends of the bolts.

11. Construct situp boards as shown in drawing.

For best results in bonding ethafoam pads to the situp boards, apply an even coat of styro bond or vinyl adhesive directly to the situp board with a serrated mastic spreader. Spread the adhesive over the entire area to be covered by the pad. Do not apply the adhesive directly to the pad material.





SITUP BOARD CONSTRUCTION

Station 7/14

BENCH BLASTS/STEPUP

Materials
3 Cedar or redwood posts (4 by 4 inches by 8 feet)
2 Pieces dimension lumber (2 by 6 inches by 10 feet)
9 Pieces dimension lumber (2 by 6 inches by 8 feet)
2 Pounds 16 penny nails
2 Bolts, nuts, washers (3/8 by 8 inches)
6 Concrete wall blocks (7-5/8 by 7-5/8 by 15-5/8 inches)

Construction Guidelines

1. The three-level bench may be constructed onsite according to the drawings, or it may be constructed indoors and taken to the site.

2. Place the bench in location and mark the ground for hole and pad location.

3. Remove bench and dig holes for concrete blocks and posts.

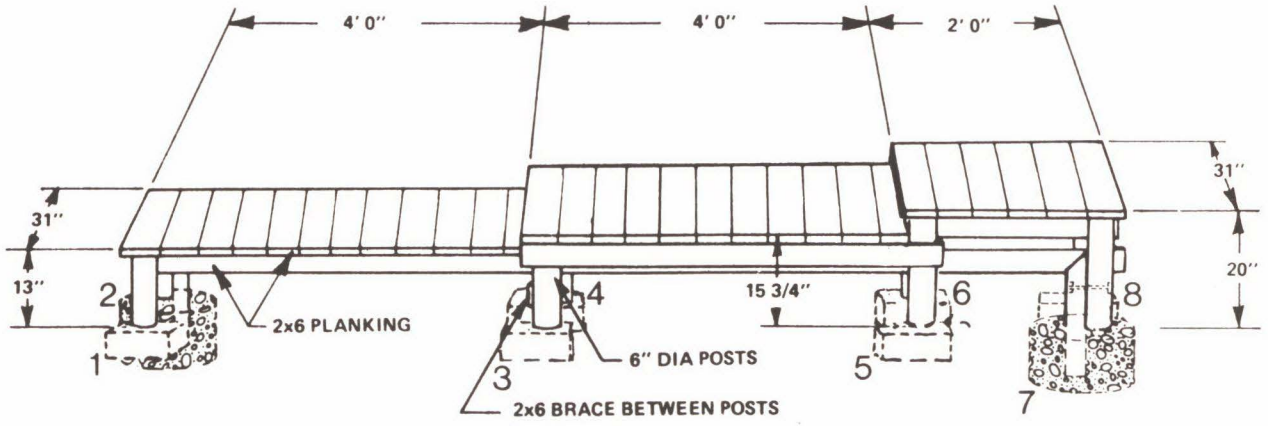
4. Set blocks in holes so that each is level with the other and tamp in dirt to stabilize.

5. Set two 4- by 4-inch posts in holes two and seven and pour concrete. Plumb posts.

6. Concrete should be made level with the six concrete blocks and smoothed.

7. After the concrete cures (24 hours), set the bench into place.

8. Bolt the bench to the posts in holes two and seven. Countersink the bolts.



Materials List for Exercise Stations

8 Cedar or redwood posts (4 by 4 inches by 8 feet)
2 Pieces dimension lumber (2 by 4 inches by 8 feet)
26 Pieces dimension lumber (2 by 6 inches by 8 feet)
2 Pieces dimension lumber 2 by 6 inches by 10 feet)
4 Pieces dimension lumber (2 by 10 inches by 8 feet)
7 Untreated rails (4 inches by 7 feet)
2 Treated posts (6 inches by 6 feet)
4 Treated posts (6 inches by 8 feet)
2 Treated posts (6 inches by 7 feet)
10 Treated posts (6 inches by 3 feet)
3 Treated posts (8 inches by 14 feet)
2 Treated posts (8 inches by 6 feet)
1 Treated or untreated post (8 inches by 8 feet)
4 Peeled untreated logs (12 inches diameter)
3 Schedule 80 (1.66od x .200 wall) galvanized steel pipes (1¼ inches by 7 feet)
2 Schedule 40 (1.9od x .145 wall) galvanized steel pipes (1½ inches by 8 feet 6 inches)
3 Schedule 40 (1.9od x .145 wall) galvanized steel pipes (1½ inches by 6 feet 8 inches)
4 Pounds 16 penny nails
5 Bolts, nuts, washers (5/8 by 8 inches)
14 Lag screws, washers (3/8 by 6 inches)
2 Lag screws, washers (3/8 by 10 inches)
40 Bolts, nuts, washers (½ by 3 inches)
12 Lag screws, washers (3/8 by 12 inches)
2 Bolts, nuts, washers (3/8 by 6 inches)
2 Strips nylon webbing (1¾ by 48 inches)
2 Ethafoam pads (½ by 19 inches by 6 feet 4 inches)
1 Tube styro bond or vinyl adhesive
2 Steel adjuster buckles for 1¾-inch webbing
8 Concrete reinforcing bars (½ by 30 inches)
6 Standard concrete wall blocks (7-5/8 by 7-5/8 by 15-5/8 inches)
4 Gallons paint or stain
2 Yards concrete (mixed)

Signing the Trail

Signs are an important part of the trail. Some explain the purposes of the trail. Others describe the exercises so they can be performed properly. Signs help insure a safe, enjoyable recreational experience.

The signs are silk-screened on a steel substrate and cost $70 per package plus postage.

For further information contact:

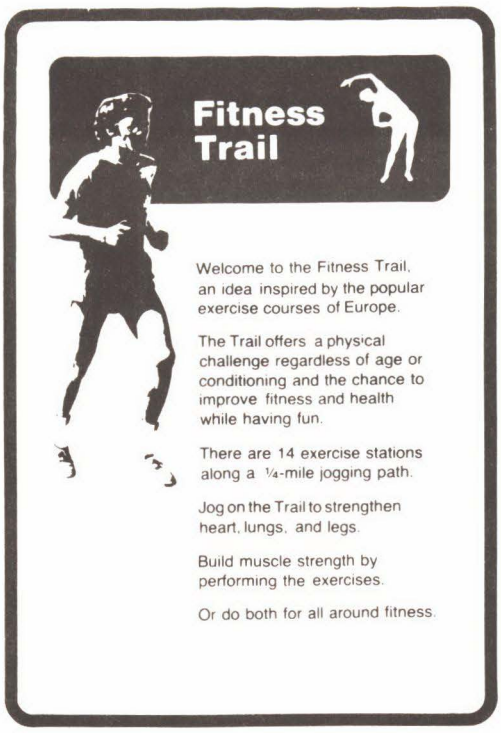
Stensrud Sign Products
314 North First West
Missoula, MT 59801
(406) 728-7446

The sign package consists of:

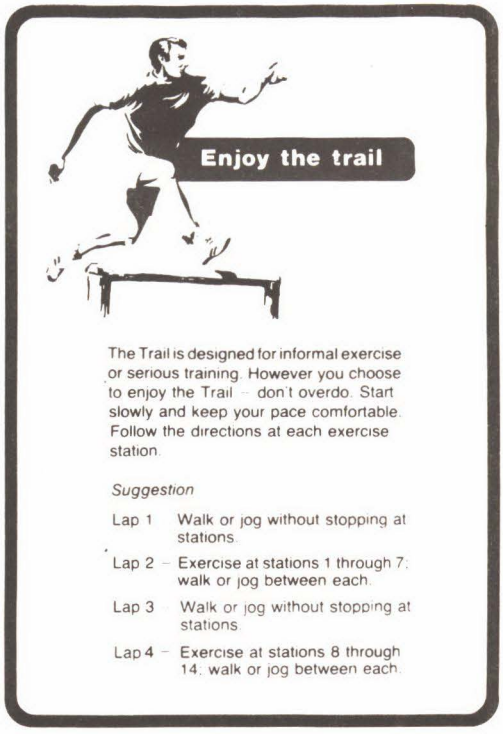
- Four signs at the trail entrance.
- Signs for the dual-purpose exercise stations.
- Directional signs.

Signs are silk-screened with brown ink on a white background. They are ready for mounting on the sign boards shown in the drawings. The signs can be affixed with screws or bonded to the boards with a compatible waterproof construction or panel adhesive.

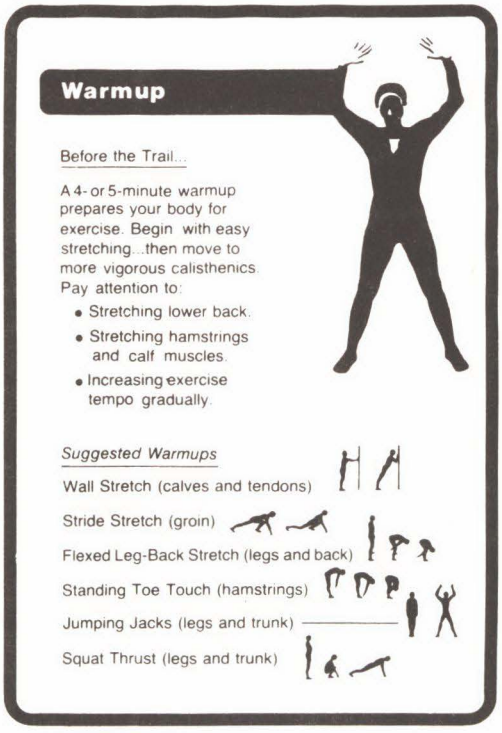
Four signs at the trail entrance:


Fitness Trail
Welcome to the Fitness Trail, an idea inspired by the popular exercise courses of Europe.
The Trail offers a physical challenge regardless of age or conditioning and the chance to improve fitness and health while having fun.
There are 14 exercise stations along a ¼-mile jogging path.
Jog on the Trail to strengthen heart, lungs, and legs.
Build muscle strength by performing the exercises.
Or do both for all around fitness.

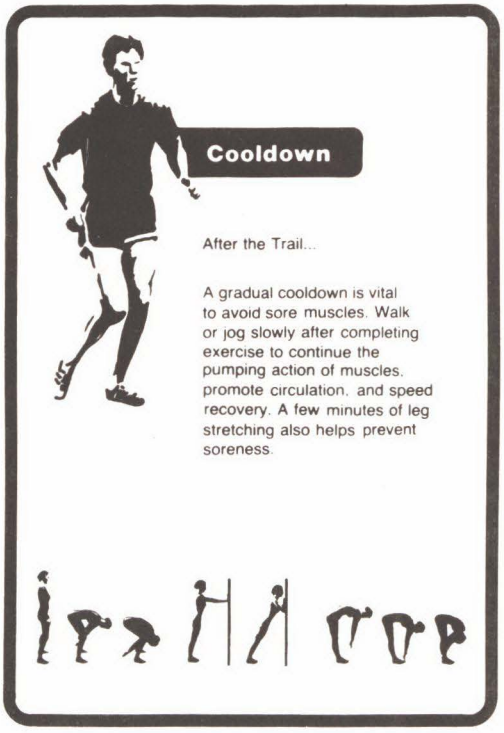
1


Enjoy the trail
The Trail is designed for informal exercise or serious training. However you choose to enjoy the Trail — don't overdo. Start slowly and keep your pace comfortable. Follow the directions at each exercise station.
Suggestion
Lap 1 Walk or jog without stopping at stations.
Lap 2 – Exercise at stations 1 through 7; walk or jog between each.
Lap 3 Walk or jog without stopping at stations.
Lap 4 – Exercise at stations 8 through 14; walk or jog between each.

2


Warmup
Before the Trail...
A 4- or 5-minute warmup prepares your body for exercise. Begin with easy stretching...then move to more vigorous calisthenics. Pay attention to:
• Stretching lower back.
• Stretching hamstrings and calf muscles.
• Increasing exercise tempo gradually.
Suggested Warmups
Wall Stretch (calves and tendons)
Stride Stretch (groin)
Flexed Leg-Back Stretch (legs and back)
Standing Toe Touch (hamstrings)
Jumping Jacks (legs and trunk)
Squat Thrust (legs and trunk)

3


Cooldown
After the Trail...
A gradual cooldown is vital to avoid sore muscles. Walk or jog slowly after completing exercise to continue the pumping action of muscles, promote circulation, and speed recovery. A few minutes of leg stretching also helps prevent soreness.

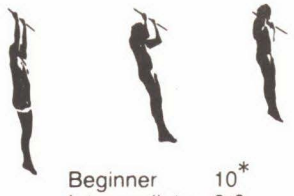
4

Signs for the seven dual-purpose exercise stations:

station 1

Chinup

Pull up till chin is over bar.
Return to hanging position.



Beginner	10*
Intermediate	3-6
Advanced	7+

*feet on ground.

station 8

Basket Hang

Raise legs into
"basket" and return.

Beginner	3
Intermediate	6
Advanced	12+

station 2

Log Hop

Face length of log. Hop sideways across log; repeat hop back across log.

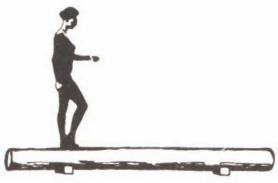
Beginner	5 hops
Intermediate	10 hops
Advanced	20 hops

station 9

Log Walk

Walk length of logs.

Start over if you drop off.



station 3

Squat Jump

Squat until legs at 90-degree angle; jump high. Switch position of feet on way down and jump again.

Beginner	5 each leg
Intermediate	10 each leg
Advanced	15+ each leg

station 10

Pushup

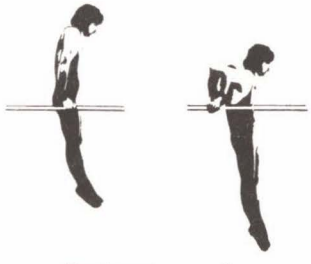
With hands outside shoulders, push up keeping back straight. Return until chest almost touches deck.

Beginner	15*
Intermediate	20
Advanced	40+

station 4

Dips

Grasp bars. Support weight on arms, lower body and return.



Beginner	1
Intermediate	5
Advanced	15+

station 11

Bar Walk

Supporting weight on arms, hand walk length of bars or as far as possible.

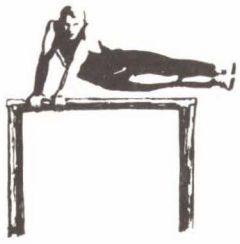
station 5

Hurdles

station 12

Vault

Vault bar of choice.



station 6

Situp

Curl up to sitting position and touch right elbow to left knee and return. Repeat, alternating right and left elbow touch.

Repetitions with board on lowest bar:

Beginner	10
Intermediate	30
Advanced	50+*

* Raise board to increase resistance.

station 13

Leg Lift

Lift legs slowly to 90-degree angle; slowly return; repeat.

Repetitions with board on lowest bar:

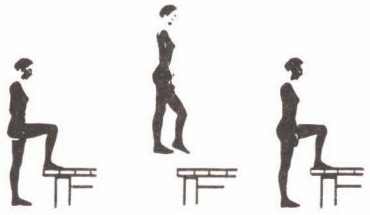
Beginner	5
Intermediate	10
Advanced	20+*

* Raise board to increase resistance.

station 7

Bench Blasts

With right foot on bench, blast off. Switch position of feet on way down. (Women use low bench, men medium bench. For added resistance use higher bench.)

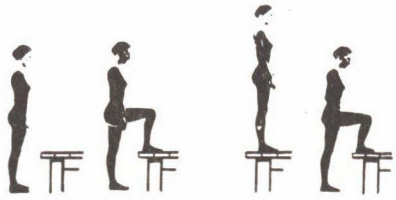


Beginner	5
Intermediate	10
Advanced	15

station 14

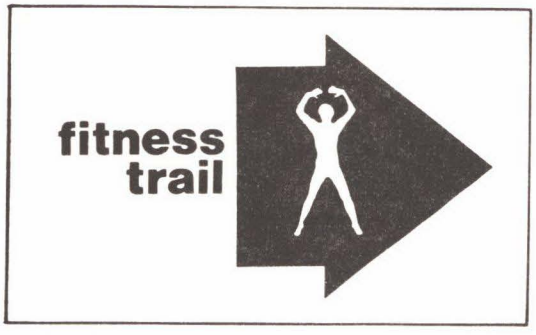
Stepup

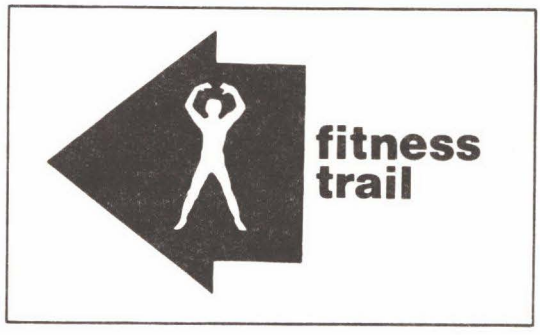
Step up and down on bench as fast as possible; do indicated number, then change lead leg. (Women use low bench, men medium bench. For added resistance use higher bench.)

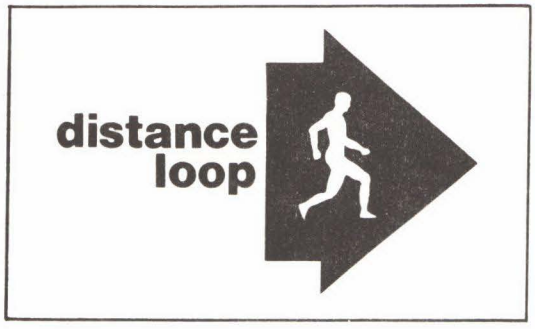


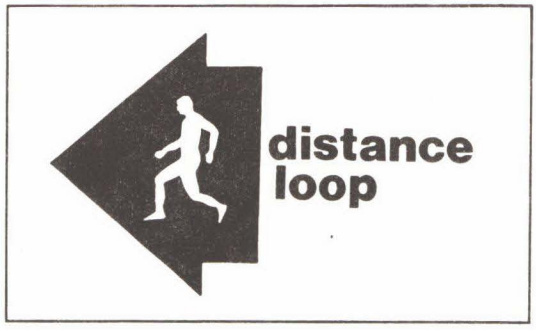
Beginner	10 each leg
Intermediate	20 each leg
Advanced	30 each leg

Directional signs:









Constructing Sign Mounts

Sign mounts are designed so the signs can be easily removed in the off-season to prolong their life.

Locate signs near appropriate stations so they can be readily seen from the trail. Make sure the signs don't compromise safe use of the stations. Locate the four-sided entrance sign far enough off the trail so there is ample room for a number of people to read the information and warm up without interfering with those already on the trail.

Position signs to minimize exposure to the sun or, if possible, locate the mounts in the shade. Exposure to direct sunlight *shortens sign life.*

Entrance Sign Box Details

Materials

1 Cedar or redwood post (4 by 4 inches by 8 feet)
24 Flathead wood screws (No. 6 by 1 inch)
4 Flathead wood screws (No. 8 by 1½ inches)
½ Pound 8 penny finish nails
Wood glue
Polystyrene glue
1 Lag bolt (¼ by 2 inches)
1 Fender washer (¼ inch)
4 Cedar or redwood posts (ripped from station sign post material) (2 by 2 by 14½ inches)
1 Piece lumber or doorstop molding (1 by 2 by 24 inches)
½ Inch exterior plywood:
1 Piece (19½ by 19½ inches)
2 Pieces (10½ by 15 inches)
2 Pieces (11½ by 15 inches)
1 Piece (10½ by 10½ inches)
½ Pint exterior latex (color optional)
2 Pints exterior oil primer
2 Pints exterior brown enamel (oil base)

Construction Guidelines

1. Construct sign box as illustrated. Do NOT install corner molding.

2. Prime and paint box and corner moldings (unassembled) with exterior primer and exterior brown (match sign color if possible).

3. Center sign on box so molding overlaps sign edges evenly. Bond signs with screws or compatible adhesive. (See illustration for sign sequence.)

4. Screw corner moldings in place.

5. Dig post hole approximately 30 inches deep.

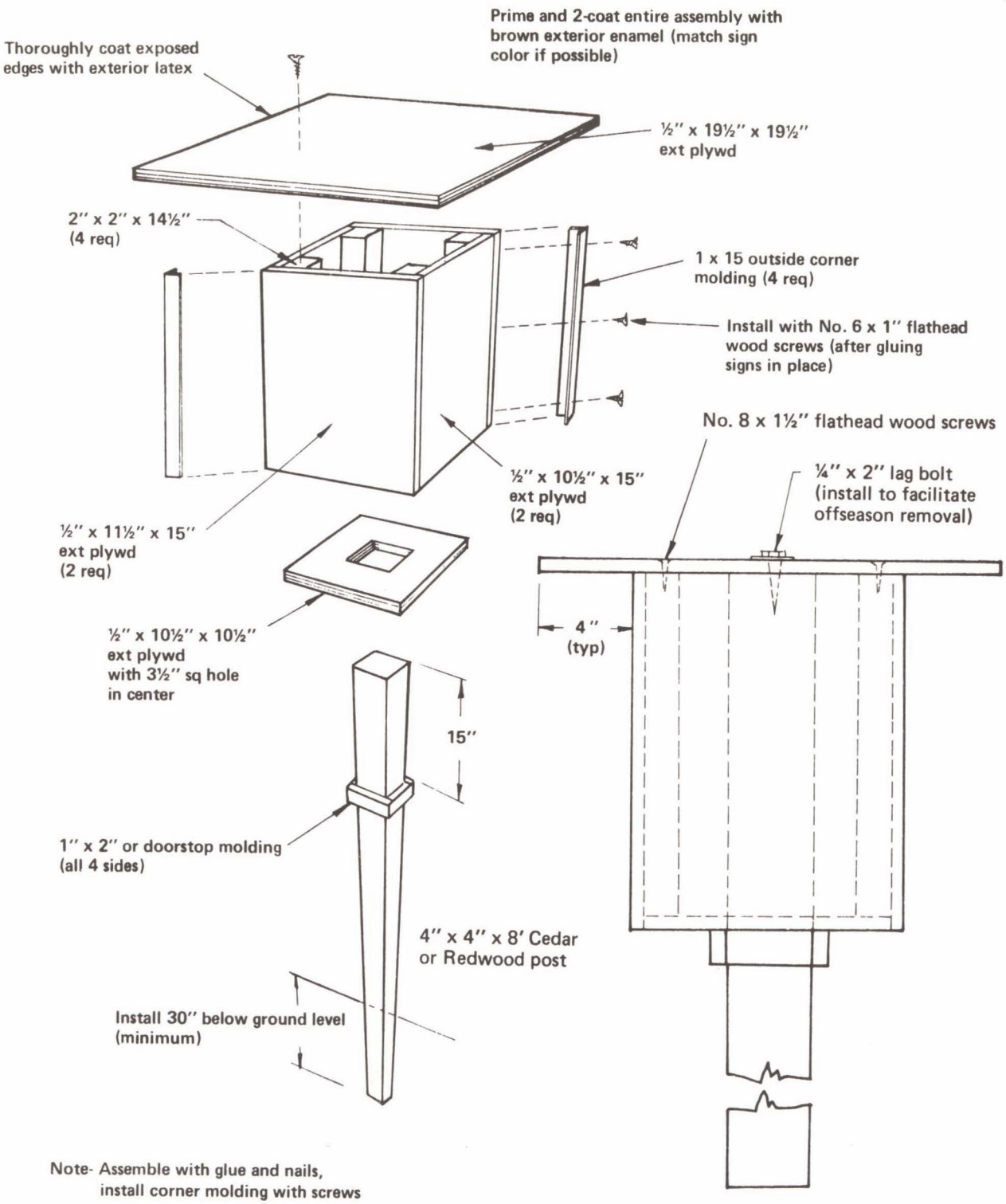
6. Glue and nail sign box stops onto a cedar post that measures 4 inches by 4 inches by 8 feet.

7. Set post in ground with one side perpendicular to trail entrance. Tamp securely in place.

8. Bolt sign box to post with sign 1 facing entrance.

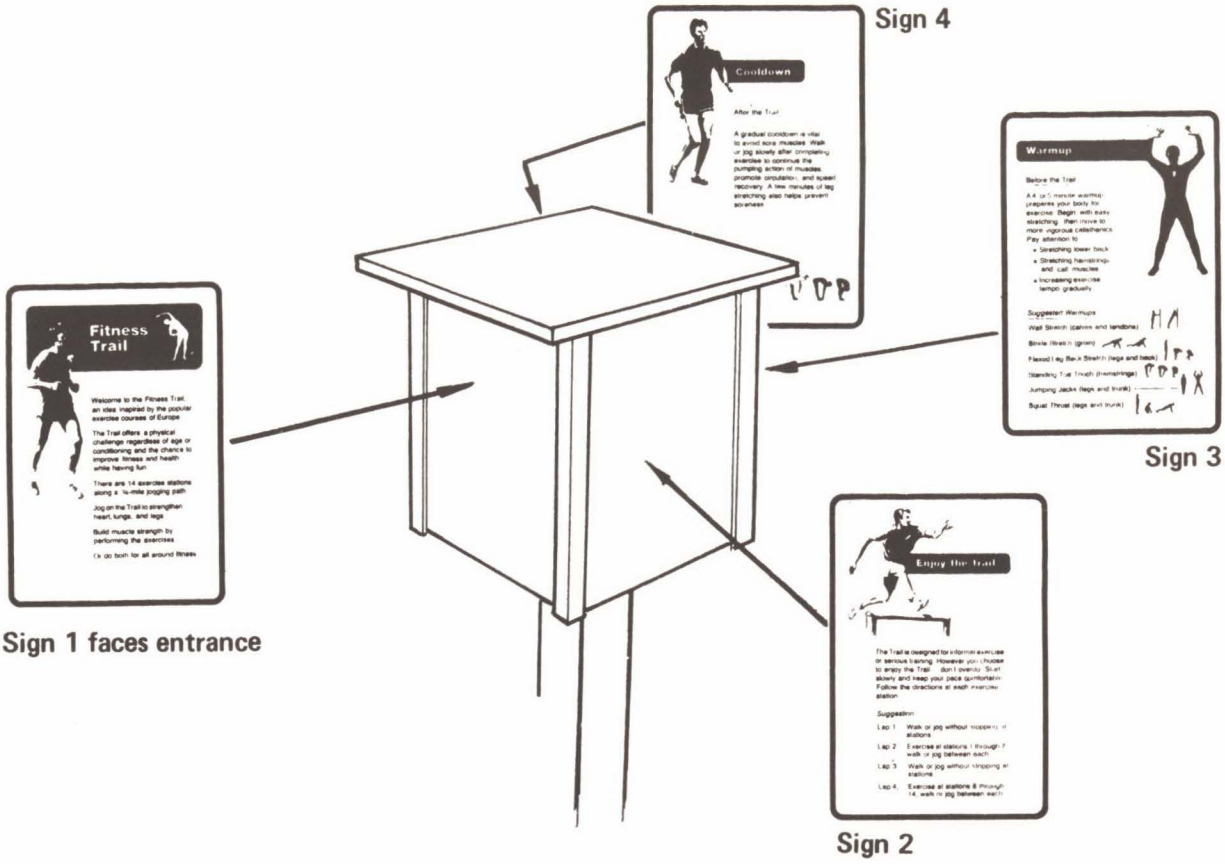
Note: Sign box is designed for easy removal for off-season storage.

ENTRANCE SIGN BOX DETAILS

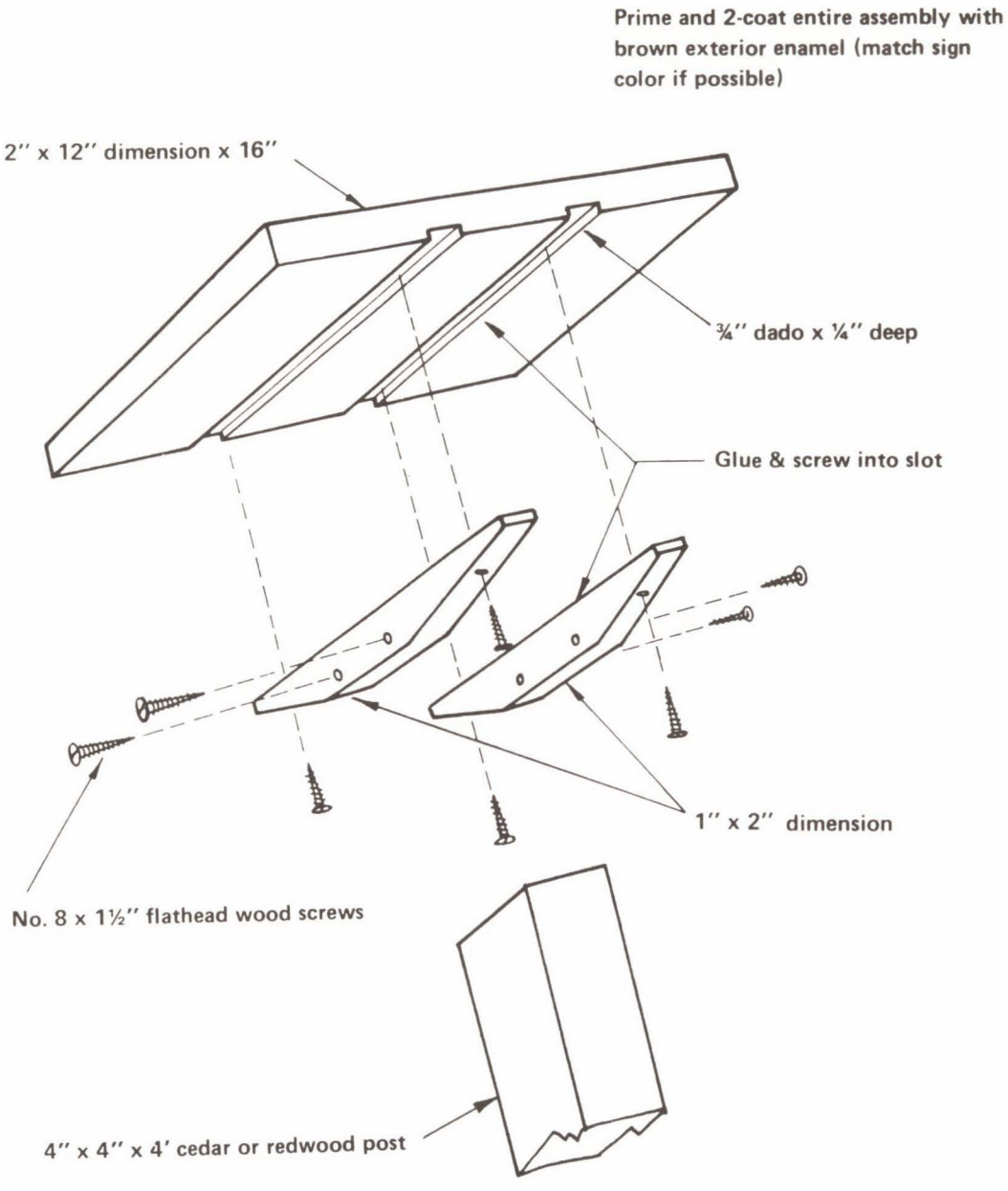

Prime and 2-coat entire assembly with brown exterior enamel (match sign color if possible)
Thoroughly coat exposed edges with exterior latex
½" x 19½" x 19½" ext plywd
2" x 2" x 14½" (4 req)
1 x 15 outside corner molding (4 req)
Install with No. 6 x 1" flathead wood screws (after gluing signs in place)
No. 8 x 1½" flathead wood screws
¼" x 2" lag bolt (install to facilitate offseason removal)
½" x 10½" x 15" ext plywd (2 req)
½" x 11½" x 15" ext plywd (2 req)
½" x 10½" x 10½" ext plywd with 3½" sq hole in center
4" (typ)
15"
1" x 2" or doorstop molding (all 4 sides)
4" x 4" x 8' Cedar or Redwood post
Install 30" below ground level (minimum)

Note- Assemble with glue and nails, install corner molding with screws

SIGN SEQUENCE



STATION SIGN MOUNT DETAILS


Prime and 2-coat entire assembly with brown exterior enamel (match sign color if possible)
2" x 12" dimension x 16"
¾" dado x ¼" deep
Glue & screw into slot
1" x 2" dimension
No. 8 x 1½" flathead wood screws
4" x 4" x 4' cedar or redwood post

Stations Sign Mount Details
Prime entire assembly and paint it with two coats of brown exterior enamel. (Match sign color if possible.)

Materials
- 7 Pieces dimension lumber (2 by 12 by 16 inches)
- 14 Pieces dimension lumber (1 by 2 inches) (Cut as per pattern)
- 56 Flathead wood screws (No. 8 by 1½ inches)
- 7 Cedar or redwood posts (4 by 4 inches by 4 feet)
- 1 Pint exterior oil primer
- 2 Pints exterior brown enamel (oil base)
- Wood glue

Construction Guidelines

1. Cut 2- by 12-inch dimension 16 inches long.

2. Dado two slots ¾- by ¼-inch-deep center on 2- by 12-inch board with a 3½-inch space between slots (width of post.)

3. Using furnished patterns, cut 1- by 2-inch dimension and drill screw holes with 5/32-inch bit.

4. Glue and screw 1- by 2-inch dimension lumber into slots.

5. Prime and paint assembly with brown enamel. (Match sign color if possible.)

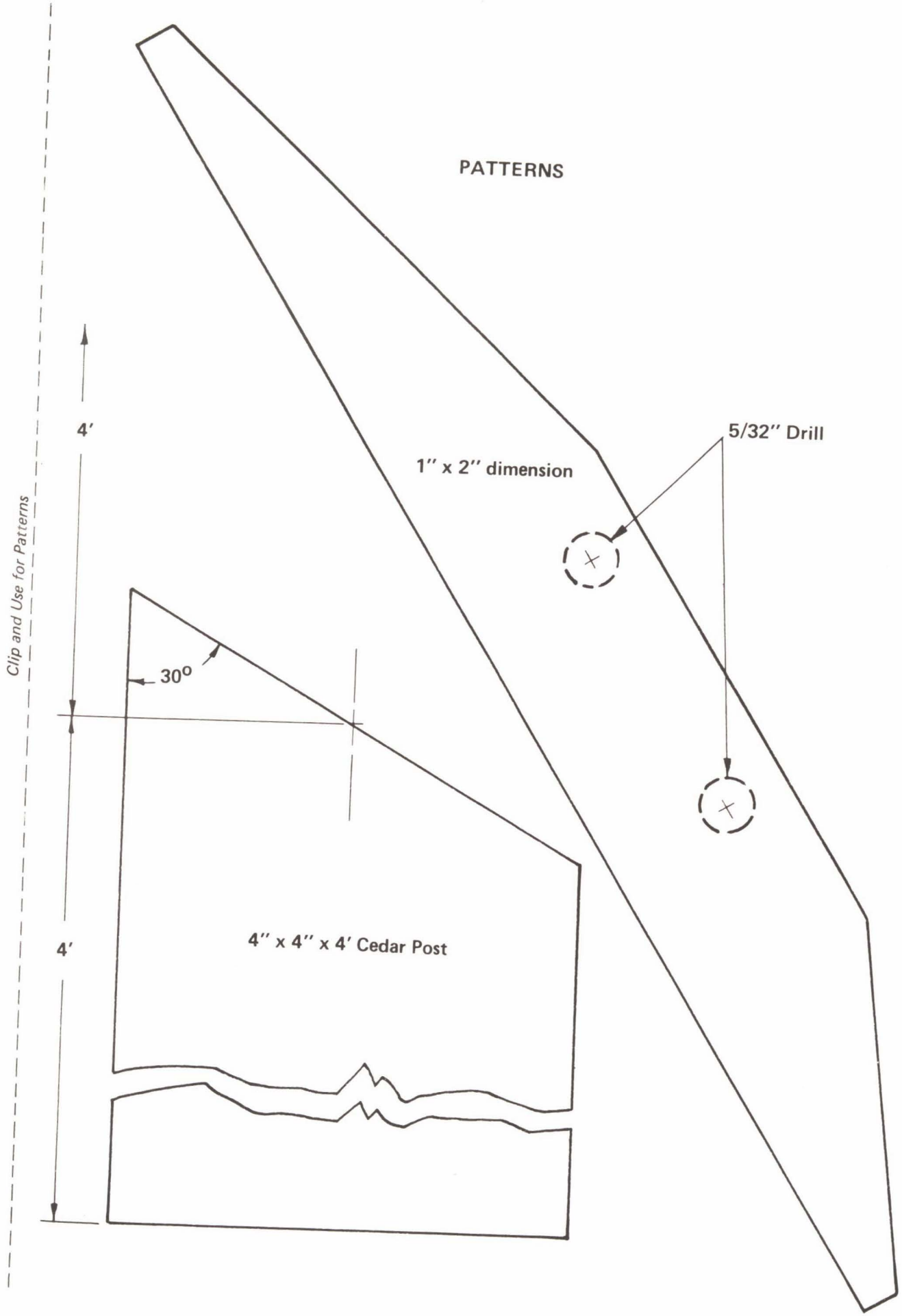
6. Bond signs to 2- by 12-inch dimension lumber with adhesive. Nail pins, screws, or edge trim can be used with the adhesive to fasten signs more securely.

7. Cut 4- by 4-inch by 4-foot post at 30° angle.

8. Dig post hole 18 to 24 inches deep. Locate sign to avoid sun. (Sign should face north, if possible, as exposure to the sun shortens the life of signs.)

9. Screw sign assembly to post.

Materials List for Sign Mounts
- 5 Cedar or redwood posts (4 by 4 inches by 8 feet)
- 1 Piece dimension lumber (2 by 12 inches by 10 feet)
- 1 Piece exterior plywood (½ inch by 4 by 8 feet)
- 2 Pieces dimension lumber (1 by 2 inches by 8 feet)
- 1 Piece outside corner molding (1 by 1 by 6 inches)
- 24 Flathead wood screws (No. 6 x 1 inch)
- 60 Flathead wood screws (No. 8 by 1½ inches)
- 1 Lag bolt (¼ by 2 inches)
- 1 Fender washer (¼ inch)
- ½ Pound 8 penny finish nails
- ½ Pint exterior latex
- 1 Quart exterior oil primer
- 2 Quarts brown exterior enamel (oil base)
- Wood glue
- Adhesive


PATTERNS
4'
1" x 2" dimension
5/32" Drill
Clip and Use for Patterns
30°
4'
4" x 4" x 4' Cedar Post

Fitness Trail Brochure

The facing page contains a Fitness Trail brochure intended for duplicating after pertinent facts about your trail are added to the two blank panels. Include things like a map, hours open, special trail features, recommended distance loops, parking information, and other tips helpful to potential trail users.

A brochure highlighting your trail will encourage use and make the experience a more enjoyable one.

If your trail was a community effort built with the help of local firms or service clubs, you may want to add a note of recognition and thanks.

Carefully detach the brochure page, paste up your information, and print the number of copies you need. Colored stock or ink adds an attractive touch.

Fold and distribute your brochures to businesses, schools, visitor information centers, clubs, and other similar groups. If the trail is near a campground, post brochures on the camp bulletin board.

After yearly maintenance on the trail each spring, renew interest with a note in area newsletters or newspapers. Reprint your brochure—perhaps in a different color—and redistribute.

Detach facing page and use as camera copy for your printer

Three-panel brochure

☆ U.S. Government Printing Office : 1984 - 421-227/10067

Clip and Use for Brochure

Fold

Fold

Fitness Trail

Welcome to the Fitness Trail. Before you begin, carefully read the four-sided sign at the trail entrance.

The Fitness Trail consists of seven dual-purpose exercise stations along a ¼-mile jogging path. Walk or jog between stations, complete the exercise, and continue on until you've finished the course. Signs describe and illustrate each exercise. They are numbered, indicating the order of performance.

The Fitness Trail was inspired by the popular Swiss exercise trails, the Vita Parcours. More than 400 parcours (French for track or course) have been built in Europe. Over 200 Fitness Trails of this design are in use in the United States.

Versatility

The Fitness Trail is versatile. It's ideal for individual or group training. It offers safe, healthful exercise regardless of your age or conditioning. Progress at your own rate and do as few or as many repeats of the exercises as you wish. You may jog the trail, ignoring the exercises. The trail offers an enjoyable physical challenge that encourages the fitness habit.

Training

Training on the trail can take many forms: formal or informal, group or individual.

Emphasize muscular fitness training Monday, Wednesday, and Friday, performing as many repetitions of each exercise as possible at the stations. To increase progress, do a set of exercises, rest, and repeat the set.

Stress jogging or running on Tuesday, Thursday, and Saturday or Sunday. Jog some after Monday, Wednesday, and Friday muscular fitness training. Here are some suggested distances.

Fitness level	Mon/Wed/Fri	Tues/Thurs/Sat or Sun
Low	1-2 miles	2-3 miles
Medium	2-3	3-5
High	3-4	4-6

Use the distance loop for longer runs.

Performance Log –Jog-Run (miles)

Week No.	M	T	W	Th	S	TOTAL
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Self-Testing

Test your muscular fitness at the exercise stations.

Performance Log–Muscular Fitness

Week no.	Chinups	Dips	Situps	Bench blasts	Pushups	Leg lifts
1						
4						
8						
12						

You can gage your own fitness by completing the course as quickly as possible doing a specific number of repetitions at each station. Later tests with the same number of repetitions indicate the rate of progress. Or time yourself in a 1½-mile run as an indication of aerobic (heart and lung) fitness.

Performance Log–Self-Testing

Week no.	Fitness Trail (min:sec)	1½-mile run (min:sec)
1		
6		
12		